OpenShift Online All Versions Release Notes

Release Notes for OpenShift Online
Edition 1.0

Red Hat OpenShift Documentation Team

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Abstract

OpenShift Online minor releases are an aggregation of individual enhancement, security, and bug fix errata. The OpenShift Online Release Notes document the major changes made to OpenShift Online and its accompanying applications for this minor release.

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Preface

1. Document Conventions

This manual uses several conventions to highlight certain words and phrases and draw attention to specific pieces of information.

In PDF and paper editions, this manual uses typefaces drawn from the Liberation Fonts set. The Liberation Fonts set is also used in HTML editions if the set is installed on your system. If not, alternative but equivalent typefaces are displayed. Note: Red Hat Enterprise Linux 5 and later include the Liberation Fonts set by default.

1.1. Typographic Conventions

Four typographic conventions are used to call attention to specific words and phrases. These conventions, and the circumstances they apply to, are as follows.

`Mono-spaced Bold`

Used to highlight system input, including shell commands, file names and paths. Also used to highlight keys and key combinations. For example:

> To see the contents of the file **`my_next_bestselling_novel`** in your current working directory, enter the **`cat my_next_bestselling_novel`** command at the shell prompt and press **`Enter`** to execute the command.

The above includes a file name, a shell command and a key, all presented in mono-spaced bold and all distinguishable thanks to context.

Key combinations can be distinguished from an individual key by the plus sign that connects each part of a key combination. For example:

> Press **`Enter`** to execute the command.
>
> Press **`Ctrl`**+**`Alt`**+**`F2`** to switch to a virtual terminal.

The first example highlights a particular key to press. The second example highlights a key combination: a set of three keys pressed simultaneously.

If source code is discussed, class names, methods, functions, variable names and returned values mentioned within a paragraph will be presented as above, in **`mono-spaced bold`**. For example:

> File-related classes include **`filesystem`** for file systems, **`file`** for files, and **`dir`** for directories. Each class has its own associated set of permissions.

Proportional Bold

This denotes words or phrases encountered on a system, including application names; dialog-box text; labeled buttons; check-box and radio-button labels; menu titles and submenu titles. For example:

> Choose **System** → **Preferences** → **Mouse** from the main menu bar to launch **Mouse Preferences**. In the **`Buttons`** tab, select the **`Left-handed mouse`** check box and click **`Close`** to switch the primary mouse button from the left to the right (making the mouse suitable for use in the left hand).
>
> To insert a special character into a **gedit** file, choose **Applications** → **Accessories** →

> **Character Map** from the main menu bar. Next, choose **Search** → **Find...** from the **Character Map** menu bar, type the name of the character in the **Search** field and click **Next**. The character you sought will be highlighted in the **Character Table**. Double-click this highlighted character to place it in the **Text to copy** field and then click the **Copy** button. Now switch back to your document and choose **Edit** → **Paste** from the **gedit** menu bar.

The above text includes application names; system-wide menu names and items; application-specific menu names; and buttons and text found within a GUI interface, all presented in proportional bold and all distinguishable by context.

Mono-spaced Bold Italic or ***Proportional Bold Italic***

Whether mono-spaced bold or proportional bold, the addition of italics indicates replaceable or variable text. Italics denotes text you do not input literally or displayed text that changes depending on circumstance. For example:

> To connect to a remote machine using ssh, type **ssh *username*@*domain.name*** at a shell prompt. If the remote machine is **example.com** and your username on that machine is john, type **ssh john@example.com**.
>
> The **mount -o remount *file-system*** command remounts the named file system. For example, to remount the **/home** file system, the command is **mount -o remount /home**.
>
> To see the version of a currently installed package, use the **rpm -q *package*** command. It will return a result as follows: ***package-version-release***.

Note the words in bold italics above: username, domain.name, file-system, package, version and release. Each word is a placeholder, either for text you enter when issuing a command or for text displayed by the system.

Aside from standard usage for presenting the title of a work, italics denotes the first use of a new and important term. For example:

> Publican is a *DocBook* publishing system.

1.2. Pull-quote Conventions

Terminal output and source code listings are set off visually from the surrounding text.

Output sent to a terminal is set in **mono-spaced roman** and presented thus:

```
books        Desktop   documentation  drafts  mss    photos   stuff  svn
books_tests  Desktop1  downloads      images  notes  scripts  svgs
```

Source-code listings are also set in **mono-spaced roman** but add syntax highlighting as follows:

```
package org.jboss.book.jca.ex1;

import javax.naming.InitialContext;

public class ExClient
{
   public static void main(String args[])
       throws Exception
   {
      InitialContext iniCtx = new InitialContext();
      Object         ref    = iniCtx.lookup("EchoBean");
      EchoHome       home   = (EchoHome) ref;
      Echo           echo   = home.create();

      System.out.println("Created Echo");

      System.out.println("Echo.echo('Hello') = " + echo.echo("Hello"));
   }
}
```

1.3. Notes and Warnings

Finally, we use three visual styles to draw attention to information that might otherwise be overlooked.

Note

Notes are tips, shortcuts or alternative approaches to the task at hand. Ignoring a note should have no negative consequences, but you might miss out on a trick that makes your life easier.

Important

Important boxes detail things that are easily missed: configuration changes that only apply to the current session, or services that need restarting before an update will apply. Ignoring a box labeled “Important” will not cause data loss but may cause irritation and frustration.

Warning

Warnings should not be ignored. Ignoring warnings will most likely cause data loss.

2. Getting Help

2.1. Do You Need Help?

If you experience difficulty with a procedure or other information described in this documentation, visit the Red Hat Customer Portal at http://access.redhat.com where you can:

- search or browse through a knowledgebase of technical support articles about Red Hat products
- submit a support case to Red Hat Global Support Services (GSS)
- access other product documentation

You can also access the OpenShift web site at https://openshift.redhat.com/ to find blogs, FAQs, forums, and other sources of information.

Red Hat also hosts a large number of electronic mailing lists for discussion of Red Hat software and technology. You can find a list of publicly available mailing lists at https://www.redhat.com/mailman/listinfo. Click the name of any mailing list to subscribe to that list or to access the list archives.

2.2. We Need Feedback!

If you find a typographical or any other error in this manual, or if you have thought of a way to make this manual better, we would love to hear from you! Please submit a report in Bugzilla: http://bugzilla.redhat.com/ against the product **OpenShift Online**.

When submitting a bug report, be sure to mention the manual's identifier: *Docs Release Notes*

If you have a suggestion for improving the documentation, try to be as specific as possible when describing it. If you have found an error, please include the section number and some of the surrounding text so we can find it easily.

Chapter 1. Current Release

This chapter highlights the new features that have been introduced in the current release of OpenShift Online.

Report a bug

1.1. New Features

Teams

Teams are now accessible for users. Teams are essentially groups of users treated as one member of a domain. Note that you can only create teams with the REST API. See the *OpenShift Online REST API Guide* at https://access.redhat.com/site/documentation for more information.

List Only the Applications You Own

With the OpenShift Online client tools, you can now search and view only those applications that belong to a domain that you own and to which you have access. See the *OpenShift Online User Guide* at https://access.redhat.com/site/documentation for more information.

PostgreSQL Environment Variables

Two new PostgreSQL environment variables have been added:

- **`OPENSHIFT_POSTGRESQL_SHARED_BUFFERS`**: This sets the memory dedicated to the PostgreSQL server for caching data.
- **`OPENSHIFT_POSTGRESQL_MAX_CONNECTIONS`**: This sets the maximum amount of allowed client connections.

Report a bug

Chapter 2. Previous Releases

This chapter lists the features, updates and fixes that were introduced in recent releases of OpenShift Online.

Report a bug

2.1. version 1.0.42

2.1.1. New Features

Application Cloning

Existing applications can now be cloned to create new applications. Furthermore, with new command options in the Client Tools, a scalable application can be cloned from a non-scalable application. See the *OpenShift Online User Guide* at https://access.redhat.com/site/documentation for more information.

Ability to Require Add-on Cartridges with Web Cartridges

Changes to Cartridge-Order now allow cartridge developers to create a web cartridge that requires an add-on cartridge. This means that cartridge developers can now create applications with included management and database cartridges.

View Domain Ownership with Client Tools

With the Client Tools, you can now view information about only the domains that you own.

Report a bug

2.1.2. Updates and Fixes

Gear Log Rotation

Gear log rotation is now available, preventing gear logs from filling up your data quota.

Report a bug

2.2. Version 1.0.41

2.2.1. New Features

New Bronze Plan

A new membership plan is now available. The Bronze plan gives users access to medium and large gears and also increases the number of maximum gears from 3 to 16. See the *OpenShift Online User Guide* at https://access.redhat.com/site/documentation for more information.

Multiple Library Paths

You can now specify a custom path for cartridge library files. Use the **OPENSHIFT_*Cart_Name*_LD_LIBRARY_PATH** environment variable to configure the location of a cartridge's library file, and send it to the global directory.

New Vert.x Cartridge

A new polygot cartridge is now available. Being a polygot cartridge, you can use a variety of existing programming languages for configuration. Create a Vert.x application at http://www.openshift.com/.

Report a bug

2.2.2. Updates and Fixes

Simplified Application Migration

Migration is now easier for PHP, Python, and Perl applications. Place application code directly into the Git repository instead of the **`php/`** or **`wsgi/`** directory. See https://www.openshift.com/blogs/openshift-online-march-2014-release-blog for the new directory structure of PHP, Python, and Perl applications.

Dependency Management Changes

As well as the application migration changes above, changes have been made to PHP, Python, and Perl dependency management:

- PHP: Add dependencies to the **`pear.txt`** file then add the file to the **`.openshift`** directory.
- Python: Add dependencies to the **`requirement.txt`** file in your application's root directory.
- Perl: Move the **`deplist.txt`** dependency file to the **`.openshift`** directory and rename it to **`cpan.txt`** in order to take advantage of the new features. Note that OpenShift still supports the **`deplist.txt`** file.

JBoss Configuration Management

In the past, changes made to JBoss applications after using the JBoss CLI tools have been overwritten once the application is restarted. A new environment variable prevents this from happening. Set this to true for OpenShift to ignore the **`standalone.xml`** file from your repository, allowing you to make your changes more easily.

```
DISABLE_OPENSHIFT_MANAGED_SERVER_CONFIG
```

Report a bug

2.3. Version 1.0.40

2.3.1. New Features

Custom Websocket Paths

OpenShift Online now supports custom non-root URLs for websockets. See the *OpenShift Online Cartridge Specification Guide* at http://access.redhat.com/site/documentation for more information.

Node.js Cartridge Upgrade

Nodejs npm is now available as an option. Note that this disables the hot deployment of Node.js applications.

Documentation

The *OpenShift Online User Guide* has been restructured for improved readability and easier access to the most common features for enhanced customer experience.

Report a bug

2.3.2. Updates and Fixes

Correct Mongo Version Displayed in Screen Output

Previously, output from MongoDB reported the version number to be 2.2. It now correctly reports version 2.4.

Quickstarts Updated

The following quickstart applications have been updated:

- Redmine
- Wordpress

OpenShift Quickstart Update

The OpenShift quickstart, an upstream community repo, can now have different web servers.

New Jenkins Feature

Jenkins now supports downloadable cartridges.

Report a bug

2.4. Version 1.0.39

2.4.1. Updates and Fixes

Cartridge Updates

Three cartridges have had an update. These cartridge versions are now supported by OpenShift Online:

- PHP 5.4
- MySQL 5.5
- Python 3.3

Zend Server has also had an upgrade. You can now create an application with Zend Server version 6.1 bundled with PHP 5.4. Note that Zend Server is now obsoleted and is no longer creatable.

Changes to Auto-Scaling Behavior

Auto-Scaling behavior has been improved. OpenShift Online now uses moving averages to determine scale up and down events. This will give more consistent results. The logic for history tracking has also had an upgrade.

No More Errors in Vim

Before, when trying to edit a file directly on a gear you recieved an error:

```
E509: Cannot create backup file (add ! to override)
```

Vim will no longer print this error.

Report a bug

2.5. Version 1.0.36

2.5.1. New Features

Specifying Cartridge Gear Size

You can now add cartridges of different sizes to your applications. Previously, all gears within an application were the same size (medium application with medium gears), but now you can specify the size of a gear when adding a cartridge using the **-g** option.

```
$ rhc cartridge add Cart_Name -a App_Name -g medium
```

This new feature is only available with the current version of the client tools, so make sure to update before attempting to try it out.

Report a bug

2.5.2. Updates and Fixes

New Pricing

The gear price for the Silver Plan has been halved. The increased demand for the 1.5 million applications created using OpenShift (and counting) has led to an increased density of our containers and operational efficiently, meaning we're able to reduce prices.

- Small Gears: $0.04/hr are now $0.02/hr per gear
- Medium Gears: $0.10/hr are now $0.05/hr per gear
- Large Gears: $0.10/hr per gear (new in December 2013)

The free plan remains unchanged and still offers three free small gears with 1GB of storage and the use of all of OpenShift Online's capabilities.

Report a bug

2.6. Version 1.0.35

2.6.1. New Features

Organize Deployments

Users can now configure the deployment process. With the new **rhc configure-app** and **rhc deploy** commands users can:

- Retain deployment metadata
- Rollback to previous deployments
- Switch between deploying from a Git reference or from a binary artifact
- Use a new zero downtime deployment mechanism in scalable applications

These much-requested features aim to give more control over the deployment process.

Add Specific Key Types

You can now add an SSH key of a specific type. Use the new **`--type`** and **`--content`** options when using the **`rhc sshkey add`** command to specify the type of SSH key you would like to add.

Report a bug

2.6.2. Updates and Fixes

New Management Console Theme

The management console has had a facelift. Explore your applications easier with the new layout, which includes a new color scheme.

Bind to any Port Above 1024

The range of ports available for binding have been almost completely opened up. With a few exceptions, users can now bind to any port above 1024.

Gear Performance Updates

Cartridges now detect the size of the gear they are in and adjust their settings accordingly. Previously, this was only available on some cartridges (JBoss, for example), but this is now available with all web and add-on cartridges.

Important Information for Jenkins Users

The changes to the deployment process may create issues in Jenkins applications. You may have to re-add any Jenkins jobs if you are using them. The best process is to make note of any custom jobs, then remove them before removing the Jenkins client from your applications. Next, re-add the Jenkins client and re-add the custom jobs to the newly installed client. This should fix any issues.

Report a bug

2.7. Version 1.0.34

2.7.1. New Features

Members

Users can now collaborate on applications and domains. Add members to your domain with one of three roles: viewer, editor, or administrator. Use the management console or the new **`rhc member`** commands to manage member options.

OPENSHIFT_SECRET_TOKEN Environment Variable

A new environment variable has been added. **`OPENSHIFT_SECRET_TOKEN`** is a randomly generated token that synchronizes all gears within an application, which developers can use like a shared key. A random key is created when clusters are formed, which saves developers from overriding the cartridge default security key.

Report a bug

2.7.2. Updates and Fixes

Updated Console Interface and More Obvious Features

The management console has had a makeover. With the addition of the domain and member options, there are now more features that need to be accessed easily. Users can see more information about their applications, their domains, and manage their members.

In the past, it may not have been clear to silver plan users when a new gear is about to be added, resulting in some unwanted bill increases. The new management console makes it more obvious when an action increases your gears (and therefore your bill).

Restoration From Web Sockets

Web socket restoration is now active. When an application is not in use it is turned off to save memory and CPU cycles. Before, when an application was being used after some time, it would have had to be turned back on. Now, the application can be launched from web sockets, resulting in speedier application relaunches.

Report a bug

2.8. Version 1.0.33

2.8.1. New Features

Custom Environment Variables

Creating an application with custom environment variables is now possible by using the command:

```
$ rhc app create foo php-5.3 ENV1=value1 ENV2=other_value ENV3="value 4"
```

Drush for Drupal Users

OpenShift Online now features a **.drush** directory for PHP and Drupal users.

Report a bug

2.8.2. Updates and Fixes

Node.js 0.10

Node.js is now officially available to OpenShift Online users. Create an application with a Node.js cartridge by using the command:

```
$ rhc app create myapp nodejs-0.10
```

phpMyAdmin 4

With the major release of phpMyAdmin cartridge version 4, compatibility with OpenShift Online has been updated too. This includes some additional features and security fixes over the previous version.

Tomcat 8

With Tomcat's update to version 8, users can now try out the updated cartridge in their applications. See https://www.openshift.com/blogs/get-tomcat-8-rc1-running-in-the-cloud-for-free-on-openshift for information on how to upgrade.

Report a bug

2.9. Version 1.0.32

2.9.1. New Features

More Resources and Improved Performance

This release contains significant improvements to OpenShift Online's performance metrics. In OpenShift's gear model, **`cgroups`** limits available resources. These limits enable OpenShift to manage resources better on nodes by controlling elements such as memory, swap space, and CPU limits.

Previously, OpenShift throttled CPU usage in such a way that even if more resources were available on a node, gear resources were limited. These limits meant that all gears behaved similarly and scaling was more predictable, but had the side effect of causing issues in some very common use cases.

With this release, users have access to increased CPU resources for short time periods. These temporary resource boosts significantly improve the handling of startup tasks, building tasks, and sudden load spikes.

REST API Enhancements

To improve consistency, the REST API no longer uses **`destroy`**; instead, it uses **`delete`** throughout the API. In addition, users can access applications directly through the REST API using an application ID, not just a domain or application name.

Custom Cartridge Environment Variable Subscription

Cartridges can now subscribe to all environment variables published by other cartridges in an application. To enable this feature for a custom cartridge, add the following subscription to the cartridge's **`$cartridge_name/metadata/manifest.yml`** file:

```
Subscribes:
  set-env:
    Type: "ENV:*"
    Required: false
```

Custom Cartridge Upgrade Script

When upgrading a cartridge to a new version, OpenShift now runs the **`$cartridge_name/bin/upgrade`** script after the new cartridge is installed but before running the **`$cartridge_name/bin/setup`** script. The **`upgrade`** script enables arbitrary actions to occur during the upgrade process. OpenShift inputs three values to the **`upgrade`** script:

```
upgrade <current software version> <current cartridge version> <new cartridge
version>
```

Custom Environment Variables

Users can now create environment variables using the client tools with the following command:

```
$ rhc env set MYAPP_AUTH_TOKEN='secret' --app myapp
```

As an extension of this capability, users can append options to **`JAVA_OPTS`** without overwriting the entire

variable by using **JAVA_OPTS_EXT**. Users can also overwrite options that already exist without them being listed twice:

```
$ rhc env set JAVA_OPTS_EXT='-DDEBUG=5' --app myapp
```

Disk Quota Warnings

To make disk quota usage more visible to users, OpenShift now displays additional output for actions such as logging in or interacting with the API. This change enables users to be better informed when their disk quota usage approaches high levels.

Report a bug

2.9.2. Updates and Fixes

Improved JBoss Cartridge Startup

JBoss cartridges are now deal equipped to deal with startup and deployment times, providing an improved startup experience.

Upstream Quickstart Maintenance

The OpenShift community is now maintaining selected quickstarts. To avoid duplication, OpenShift Online is deleting outdated quickstart repositories on GitHub. Please read the following blog post about quickstart housekeeping to find out if your application is affected: https://www.openshift.com/blogs/quickstart-maintenance-moves-upstream.

PHP PEAR Updates

PHP PEAR now works correctly with Jenkins. To improve usability, PEAR executables are now included in a user's $PATH.

PostGIS Support

PostGIS support is now available with Postgres 9.2.

Python 2.7

Python 2.7 is now an officially supported OpenShift Online cartridge. If users have manually installed packages in their virtual environment, they may need to reinstall those packages.

Report a bug

Revision History

Revision 1.0.43-0	**Thu Apr 24 2014**	**Brice Fallon-Freeman**

Update for Sprint 43 release.

Revision 1.0.42-0	**Wed Apr 09 2014**	**Brice Fallon-Freeman**

Update for Sprint 42 release.

Revision 1.0.41-0	**Mon Mar 17 2014**	**Brice Fallon-Freeman**

Update for Sprint 41 release.

Revision 1.0.40-0	**Thu Feb 27 2014**	**Brice Fallon-Freeman**

Update for Sprint 40 release.

Revision 1.0.39-0	**Tues Jan 28 2014**	**Brice Fallon-Freeman**

Update for Sprint 39 release.

Revision 1.0.36-0	**Fri Nov 22 2013**	**Brice Fallon-Freeman**

Update for Sprint 36 release.

Revision 1.0.35-1	**Mon Nov 04 2013**	**Brice Fallon-Freeman**

Update for Sprint 35 release.

Revision 1.0.34-0	**Mon Oct 14 2013**	**Brice Fallon-Freeman**

Update for Sprint 34 release.

Revision 1.0.33-0	**Wed Sep 25 2013**	**Brice Fallon-Freeman**

Update for Sprint 33 release.

Revision 1.0.32-0	**Thu Aug 29 2013**	**Bilhar Aulakh**

Update for Sprint 32 release.